



# North Carolina Department of Transportation

## Wetland and Stream Mitigation



# Why does NCDOT need mitigation?

## NCDOT Mission Statement

*Connecting people and places safely and efficiently, with accountability and environmental sensitivity, to enhance the economy, health and well-being of North Carolina.*

To carry out the mission statement, NCDOT builds transportation projects that require permits from US Army Corps of Engineers and NCDENR if the project impacts wetlands, streams, or buffers as mandated by Federal rules and guidelines





# Federal Rules and Guidelines

- 1899 - The Rivers and Harbors Acts  
Delegated authority over projects and activities in navigable waters to USACE
- 1972 - Clean Water Act (33 USC 1344)
- 1980 - Section 404(b)(1) Guidelines  
Set criteria used in evaluating regulated activities
- 1988 - National Wetlands Policy Forum
  - Clean Water Act (33 USC 1344)- Section 401 guidelines
  - Recommended more aggressive use of State's certification authorities, established "No Net Loss" criteria
  - 1996 - NCDWQ 15A NCAC 02H.0500





# Federal Rules and Guidelines

- 1990 – EPA/USACE MOA  
Established three step sequence of avoidance, minimization, compensatory mitigation
- 2002 - National Wetlands Mitigation Action Plan  
RGL 02-2 - Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts
- 2003 – USACE Guidance on 1998 TEA-21  
Established preference for wetland mitigation banking
- 2008 - Final Compensatory Mitigation Rule



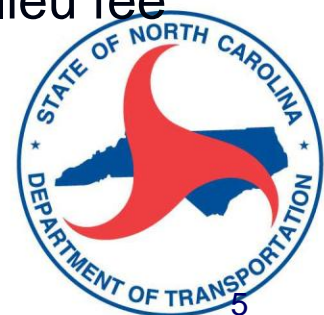




# 2008 Final Compensatory Mitigation Rule

## 40 CFR Part 230, Compensatory Mitigation for Losses of Aquatic Resources

- Affirmed the requirement to adhere to the mitigation sequence of avoidance, minimization, compensatory mitigation
- Defined methods of compensatory mitigation to include restoration, establishment, enhancement, and preservation
- Emphasized the importance of watershed needs assessment
- Established standards for all three delivery mechanisms of permittee-responsible mitigation, mitigation banks, and in-lieu fee
- Encouraged the expansion of mitigation banking





# NCDOT Mitigation Strategies

- NCDOT Onsite
- Prior to 2003 - NCDOT Offsite
  - Mitigation Sites
  - Mitigation Banks
- Prior to 2003 - NCDOT use of In-lieu Fee Program
- After 2003 - NCDOT use of Ecosystem Enhancement Program





# NCDOT Onsite Mitigation

## Adjacent to Roadway projects

- Typically “Added value” for right-of-way required for transportation project and 1:1 impact to mitigation ratio
- Most involve stream channel relocation or causeway removal in wetlands

NCDOT Onsite mitigation strategy continues today





## Prior to 2003 - NCDOT Offsite Mitigation

- Mitigation Projects

NCDOT was responsible for development of a mitigation project through agency coordination and approval of the site acquisition, plan, design, construction, monitoring, and long-term protection

- Mitigation Banks

NCDOT contracted 14 projects under banking scenarios

After 2003 - Credits and management transferred to NCEEP







## Prior to 2003 - NCDOT use of In-lieu Fee

1996 Wetland Restoration Program established by state legislation

1998 MOU between USACE and NCDENR allowed WRP to act as in-lieu fee program and provide mitigation for NCDOT in high need areas of the state.

After 2003 - Site credits and management transferred to NC EEP





## Prior to 2003 - Mitigation Challenges

Problem - Mitigation was on the permitting critical path and was contributing to transportation project delays

Reasons - Mitigation delivery was not keeping up with mitigation demand and was not being planned early enough in the project development process

- Increase in Transportation program and impacts
- Increase in Regulatory requirements
- Multiple reviews of mitigation sites and plans
- Lack of acceptable mitigation available at permit time





# Mitigation Process Improvement Initiative

**Solution – 2001 Interagency Mitigation Process Improvement Initiative launched by NCDOT, NCDENR, and USACE along with participants from USEPA, USFWS, and NCWRC**

**Mission – Developed a structured mitigation process that supports the timely delivery of North Carolina's Transportation Program while appropriately compensating for unavoidable and minimized wetland, stream, and buffer impacts.**





# Memorandum of Agreement with NCDOT, NCDENR and USACE establishing NCEEP July 2003

Purpose - provide stream and wetland mitigation in advance of impacts for NCDOT projects, thereby taking mitigation off the critical path for project schedules.

## Outcome

- Simplified permit process
- Allowed highway and mitigation work to progress concurrently and separately
- Provided for improved interagency relationships







# NCDOT / NCEEP MOA Operational process

NCDOT provides NCEEP a list of transportation projects and estimated impacts for each year based on a 7-year STIP Highway program

NCEEP develops Operational Strategic Plan to meet NCDOT's mitigation needs

NCEEP develops biennial budget and requests NC Board of Transportation approval

NCDOT pays actual costs to NCEEP based on quarterly invoices





## NCDOT / NCEEP MOA Results

- No NCDOT projects delayed due to lack of mitigation since the inception of NCEEP
- 3.8% - Cost of mitigation to Total Highway budget (SFY 04 – SFY 12)
  - \$518 million - Total Mitigation Costs since NCEEP inception
  - \$13.7 billion - Total Highway Program Costs





## Future Considerations

- The formation of NCEEP supported NCDOT in meeting its mission statement while delivering required compensatory mitigation without causing project delays
- NCDOT must evaluate future needs and direction in a new economic environment
  - NCDOT Mission must still be met
  - NCDOT Mitigation Obligation must be fulfilled
  - Budget constraints must be considered





# What Role do Private Mitigation Bankers play in Future Considerations?

- Private Mitigation Bankers assume all liability associated with credit delivery thereby reducing risks for NCDOT
- All costs are known up-front for private banks which improves predictability for NCDOT
- Credit delivery is contract based with private mitigation bankers thereby streamlining administration, approval process, and delivery time.
- Use of private mitigation banks as priority complies with legal requirements of 2008 Final Mitigation Rule and NCGA







# What Role does NCEEP play in Future Considerations?

- NCEEP can use multiple mechanisms for mitigation delivery including full delivery, private banks, and in-house site development
- NCEEP operates statewide to meet NCDOT's mitigation needs, providing NCDOT a “one stop shop”
- NCEEP can utilize Advance Credit process as approved by the USACE allowing transportation projects to be let without dependence on released mitigation credits





## Conclusions

- NCDOT prefers for a third party to provide offsite mitigation
- Utilization of NCEEP is essential to NCDOT meeting its mitigation obligation and its project delivery schedule
- Opportunity exists for Private Mitigation Banks to play a greater role as mitigation providers

NCDOT must develop best business model to address its mitigation obligation, budget constraints, and North Carolina's transportation needs.

